January 16, 2008
Captain Richard J. Duncan
Joint Interoperability Test Command
Fort Huachuca, Arizona

Dear Captain Duncan:

Sun is submitting this information for your evaluation, as required by your office as a prerequisite to DISA testing Solaris for IPv6. All information provided in this letter is provided AS-IS, and all representations and warranties, express or implied, including fitness for a particular purpose, merchantability and non--infringement, are hereby disclaimed.

Sun Microsystems, Inc. Solaris 10 08/07 Operating System has been tested for conformance and to our knowledge complies with the DOD IPv6 Standard Profiles for IPv6 Capable products for Host/Workstations and Network Server Requirements on SPARC and x86/X64 platforms.

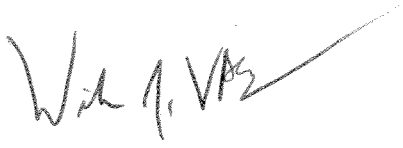
In addition, Solaris 10 has completed the IPv6 logo program certification at the University of New Hampshire Interoperability Laboratory as described in the references.

Solaris 10 supports the following required RFCs as stated in Appendix F of the DOD IPv6 Test Plan, Version 3 under Host/Workstation Requirements and for Network Server Requirements.

As registered with the Open Group (http://www.opengroup.org/openbrand/register/xy.htm), Solaris 10 is certified to comply with UNIX 03 on SPARC 32-bit and 64-bit platforms, and 32-bit and 64-bit x86 platforms as specified in the Advanced Server Profile of DoD IPv6 Standards Profile for IPv6 Capable Products, Version 2, Section 3.1.3.1.

We look forward to the submittal of Solaris 10 08/07 on both the SPARC and X64 CPU architectures for inclusion in the Approved Product List certification process.

Sincerely,



William J. Vass
President and Chief Operating Officer
Sun Microsystems Federal, Inc.

References:
UNH IPv6 logo certification: http://www.iol.unh.edu/services/testing/ipv6/logoholders.php
Attachment: Solaris RFC Compliance list.

Below are the RFCs for Host/Workstation Requirements and Network Server Requirements that we believe comply based on our internal testing.

Host/Workstation Requirements

IPv6 Base

- ❑ RFC 1981 Path MTU Discovery for IPv6
- ❑ RFC 2460 Internet Protocol v6 (IPv6) Specification
- ❑ RFC 2461 Neighbor Discovery for IPv6
- ❑ RFC 2462 IPv6 Stateless Address Auto-configuration or RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6) or both.
- ❑ RFC 2462 IPv6 Stateless Address Auto-configuration (Section 5.5 only)
- ❑ RFC 4007 IPv6 Scoped Address Architecture
- ❑ RFC 4193 Unique Local IPv6 Unicast Addresses
- ❑ RFC 4291 IP Version 6 Addressing Architecture
- ❑ RFC 4443 Internet Control Message Protocol (ICMPv6)
- ❑ RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- ❑ RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6

(Required support for at least one of the below)

- ❑ RFC 2464 Transmission of IPv6 Packets over Ethernet Networks

IPSec

- ❑ RFC 2401 Security Architecture for the Internet Protocol
- ❑ RFC 2406 IP Encapsulating Security Payload (ESP)
- ❑ Part RFC 4305 (ESP and AH) Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)
  - Null Encryption
  - AES-CBC
  - 3DES-CBC
  - HMAC-SHA-1
  - HMAC-MD5
- ❑ 2407-09 IKEv1 protocol

Transition Mechanisms

- ❑ 4213 RFC 4213 Transition Mechanisms for IPv6 Host and Routers

Common Network Applications

- ❑ RFC 3986 Uniform Resource Identifier (URI): Generic Syntax
- ❑ RFC 3484 Default Address Selection for IPv6
- ❑ RFC 3596 DNS Extensions to Support IPv6 (Hosts must be capable of using IPv6 DNS)
- ❑ RFC 3041 Privacy Extensions for Stateless Address Auto-configuration in IPv6
- ❑ Any required network application that device is required to use (i.e. HTTP, FTP, SMTP)

Network Server Requirements (Simple and Advanced Server)

IPv6 Base

- ❑ RFC 2460 Internet Protocol v6 (IPv6) Specification
- ❑ RFC 2461 Neighbor Discovery for IPv6
- ❑ RFC 2462 IPv6 Stateless Address Auto-configuration or RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6) or both.
- ❑ RFC 2462 IPv6 Stateless Address Auto-configuration (Section 5.5 only)
- ❑ RFC 4007 IPv6 Scoped Address Architecture
- ❑ RFC 4193 Unique Local IPv6 Unicast Addresses
- ❑ RFC 4291 IP Version 6 Addressing Architecture
- ❑ RFC 4443 Internet Control Message Protocol (ICMPv6)
- ❑ RFC 2710 Multicast Listener Discovery (MLD) for IPv6

(Required support for at least one of the below)

- ❑ RFC 2464 Transmission of IPv6 Packets over Ethernet Networks

Advanced Server (Must support the Host/Workstation requirements and add network services according to the manufacturer's service profile)

- ❑ RFC 1981 Path MTU Discovery for IPv6
- ❑ RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- ❑ RFC 4213 Transition Mechanisms for IPv6 Host and Routers (Hosts/Workstations MUST support dual stacks and MAY support other mechanisms)
- ❑ RFC 3986 Uniform Resource Identifier (URI): Generic Syntax
- ❑ RFC 3484 Default Address Selection for IPv6
- ❑ RFC 3596 DNS Extensions to Support IPv6 (Hosts must be capable of using IPv6 DNS)
- ❑ RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- ❑ RFC 3041 Privacy Extensions for Stateless Address Auto-configuration in IPv6

IPSec

- ❑ RFC 2401 Security Architecture for the Internet Protocol
- ❑ RFC 2406 IP Encapsulating Security Payload (ESP)
- ❑ RFC 4305 (ESP and AH) Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)

- Null Encryption
- AES-CBC
- 3DES-CBC
- HMAC-SHA-1
- HMAC-MD5

- 2407-09 IKEv1 protocol

Transition Mechanisms

- RFC 4213 Transition Mechanisms for IPv6 Host and Routers

Additional Services beyond MUST Support

- RFC 2462 IPv6 Stateless Address Auto-configuration or RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6) or both.
- RFC 3226, DNS Security and IPv6 Aware Server/Resolver Message Size Requirements
- RFC 3261, Session Initiation Protocol (SIP)
- RFC 2911, Internet Printing Protocol (IPP)
- RFC 2821, Simple Mail Transfer Protocol (SMTP)
- RFC 2428, FTP Extensions for IPv6 and NATs; Server must be capable of transferring files with IPv6 and support Extended Data Port (EPRT) and Extended Passive (EPSV) commands
- Standard 9/RFC 959, File Transfer Protocol (FTP)